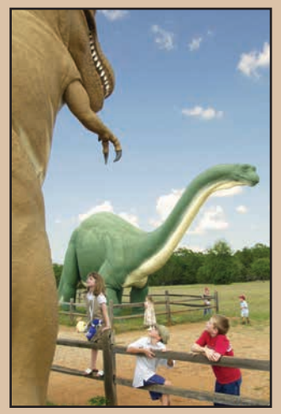
THINGS TO DISCOVER



Look for the tracks in the riverbed and attend one of the ranger-led track talks in the river. Check posted schedules for dates and times. Be careful crossing the river, as the rocks are slick and the current can be swift.

Attend an interpretive program at the park amphitheater or take a guided hike.

Explore the Paluxy River Nature Trail to learn about the river and the flora and fauna of the park.

Grab your binoculars and go birding. Ask at the park office for the park bird list. Look for the endangered golden-cheeked warbler and black-capped vireo. Wear appropriate shoes and take plenty of water — the trails have no water and are steep and rugged.

Take your picture with the dinosaur models that were displayed at the 1964 World's Fair in New York City.

Please help us care for the special natural and cultural resources of Dinosaur Valley State Park by leaving things as you found them and staying on designated trails. All of the plants, animals and fossils are protected by law so that everyone can enjoy them. Visit the park store to find souvenirs of your visit.

Dinosaur Valley State Park
1629 Park Road 59, Glen Rose, Texas 76043
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Interpretive Guide to:

DINOSAUR VALLEY
STATE PARK

DINOSAUR VALLEY STATE PARK IS MORE THAN JUST DINOSAUR TRACKS. IT IS THE SITE OF THE FIRST SAUROPOD TRACKWAY EVER DISCOVERED IN THE WORLD. DINOSAURS FROM THE CRETACEOUS AGE LEFT THEIR FOOTPRINTS IN THE SOFT MUD OF A SHALLOW SEA THAT COVERED CENTRAL TEXAS 113 MILLION YEARS AGO. HERE IN THE RIVERBED OF THE SCENIC PALUXY RIVER YOU CAN SEE WORLD-CLASS EXAMPLES OF THE SAUCER-SHAPED FOOTPRINTS OF SAUROPODS AND THREE-TOED TRACKS OF THEROPODS.

Just as the tracks continue to change as the river erodes exposed tracks and reveals new ones, so does our knowledge of the dinosaurs. People come from all over the world to study the stories revealed by the footprints. The National Park Service designated Dinosaur Valley State Park a National Natural Landmark in 1968 for the outstanding display of dinosaur footprints found here. These tracks and trackways changed scientific thinking about the herding, habits and locomotion of the sauropods that once roamed Texas.

The fossilized trackways provide clues to the habits of the dinosaurs. The sauropod trackways show that they travelled in herds. They travelled with the adults on the outside flanks and juveniles contained in the middle, possibly to protect them from predators or danger. Trackways show that the sauropods moved more slowly (about 2.7 miles per hour) than the speedier theropods (about 5 miles per hour). Fossil hunter R.T. Bird theorized that the Paluxy trackway might provide evidence of an attack by the faster and more ferocious theropod on a slower-moving sauropod, a theory that has been discussed and debated for years but never proven.

A CHANGING ENVIRONMENT

Dinosaur Valley State Park owes its scenic beauty to the Paluxy River Valley. "Cedar brakes" of evergreen Ashe juniper woodlands cover half of the hilly, hardscrabble limestone terrain providing habitat for the endangered golden-cheeked warbler and black-capped vireo. Meadows of big and little bluestem prairie grasses flourish in the open spaces. The shady riparian area along the river boasts tall hardwood trees like bur oaks, cottonwoods and pecans.

During the days of the dinosaurs, this area looked very different. There was no Paluxy River to carve a path creating hill country, just a large shallow sea. The Glen Rose area was the Texas coast of the Cretaceous with beaches, lagoons and coral reefs.

The shells of crustaceans that lived in this sea left calcium carbonate deposits that made the limestone you see today and created the special "limy" mud that preserved the footprints of the dinosaurs that roamed the area browsing on the large tropical palm and conifer trees along the shore.

Golden-cheeked warbler
STEVE MASLOWSKI, USFWS

RALPH LAUER IMAGES FOR FORT WORTH MUSEUM OF SCIENCE & HISTORY

The State Dinosaur of Texas, *Sauroposeidon proteles (*aka *Paluxysaurus jonesi)*, lived around 112 million years ago during the Cretaceous Period and was common to North Texas. The fully articulated dinosaur skeleton can be experienced in the DinoLabs at the Fort Worth Museum of Science and History.

DINOSAUR DISCOVERIES

TRACKS OF THE THEROPODS

Nine-year-old George Adams stumbled across strange three-toed tracks that looked like prints of a giant bird in a tributary of the Paluxy in 1909. After he reported his find to the principal, his entire school made a field trip to see the dinosaur tracks. About the same time, Charlie Moss was looking for a place for his moonshine still and discovered tracks in the Paluxy River. The mighty force of flood waters in 1908 may have uncovered these fossilized tracks made millions of years ago.

Dr. Ellis Shuler, a paleontologist at Southern Methodist University, wrote the first scientific reports about these theropod tracks in 1918. However, the Paluxy River footprints did not become famous until R. T. Bird saw them in 1937 while collecting fossils for the American Museum of Natural History. Bird decided to visit Glen Rose after seeing a near-perfect theropod footprint on display at a trading post in Gallup, New Mexico.

The theropod prints probably belong to the carnivorous Acrocanthosaurus, a smaller relative of Tyrannosaurus rex. The carnivorous Acrocanthosaurus ran on two legs as it pursued its prey. It was about 20 to 30 feet long and left tracks ranging from 12 to 24 inches long and 9 to 17 inches wide. The perfection of the prints inspired Bird to spend days in the river uncovering more of the theropod trackway.

STEPS OF THE SAUROPODS

Then Bird made his big discovery in the Paluxy riverbed — a large sauropod track! Bird had never seen a sauropod track before, and these in the Paluxy were the first distinct prints ever found in the world. As he searched for more, he made an even bigger discovery when he found a near-perfect trackway recording the multiple steps of multiple animals, both sauropods and theropods.

The tracks left by the large, plant-eating sauropods with pillar-like legs were rounded hind footprints over a yard long with smaller, clawless horseshoe-shaped front footprints. Finding these footprints revolutionized scientific thinking about sauropods. Now scientists knew they walked on all four feet on land rather than relying on water to support their large bodies.

For many years scientists believed the sauropod tracks belonged to the brachiosaur Pleurocoelus. Then, bones found upriver on a ranch in Hood County in 1996 provided new clues for paleontologists. Peter Rose, a graduate student at Southern Methodist University, studied these bones and determined they belonged to a new species of dinosaur that he named *Paluxysaurus jonesi* in 2007. Even more recently, scientists have determined that the sauropod tracks belonged to *Sauroposeidon proteles*.

Rose found that the 20-ton Sauropod stood 60 to 70 feet long, 12 feet high and 6 feet wide at its shoulder. Its 26-foot-long, giraffe-like neck was even longer than its tail. The head had higher cheekbones than other sauropods with small peg teeth for grabbing food and large nostrils flaring up on top of its snout instead of out. The large feet appear to match the footprints in the Paluxy. The Texas Legislature proclaimed *Paluxysaurus jonesi* the official dinosaur of Texas in 2009.